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CLAIMS

- 1. A method of screening a sample for the presence of one or more abnormally glycosylated and/or expressed proteins, comprising the steps of i) exposing said sample to two or more different lectins and/or antibodies ii) determining the extent of binding of said sample to at least two of said lectins and/or antibodies and iii) comparing the determined extent of binding to said at least two lectins and/or antibodies with that of a control sample.
- 2. A method according to Claim 1, in which the sample comprises a human or animal body fluid.
 - 3. A method according to Claim 2, in which the body fluid sample is directly exposed to said two or more lectins and/or antibodies.
- 15 4. A method according to any preceding Claim, in which the determination is performed in real time.
 - 5. A method according to Claim 4, in which the sample is simultaneously exposed to an array of said two or more lectins and/or antibodies immobilised on a solid support surface.
 - 6. A method according to any of Claims 3 to 5, in which the determination is performed by an evanescent optical technique.

- 7. A method according to Claim 6, in which said apparatus detects light reflected from at the solid support surface.
- 8. A method according to any preceding Claim, in which said two or more lectins
 and/or antibodies comprise only lectins.
 - 9. A method according to any preceding Claim, in which the lectins are specific for sialic acid, galactose, mannose, glucosamine or fucose containing oligosaccharides.

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- 10. A method according to Claim 9, in which the lectins comprise Sambucus nigra agglutinin and/or Maackia amurensis agglutinin.
- 11. A method according to any preceding Claim, in which the protein comprises recombinant erythropoietin, chorionic gonadotropin or human growth hormone.
 - 12. A method according to any of Claims 1 to 10, in which the protein comprises a transferrin.
- 20 13. A method for determining use of a glycoprotein drug in a mammal comprising the steps of i) taking a body fluid sample ii) exposing said sample to two or more different lectins and/or antibodies iii) determining the extent of binding of said sample to at least two of said lectins and/or antibodies and iii) comparing the extent of binding of said at least two lectins and/or antibodies to that of a control sample.

A method according to Claim 13, comprising the features of any one of 14. Claims 2 to 11.

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A method for the diagnosis of acquired or inherited glycosylation disorders 16. comprising the steps of i) taking a body fluid sample ii) exposing said sample to two or more different lectins and/or antibodies iii) determining the binding pattern of said sample to at least two of said lectins and/or antibodies and iii) comparing the determined extent of binding to said at least two lectins and/or antibodies to that of a control sample.

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- A method according to Claim 16, comprising the features of any one of 17. Claims 2 to 10 or Claim 12.
- A kit of parts for use in the method of any preceding Claim, comprising one or 18. more lectins and/or antibodies and a control sample and/or information relating to 15 normal or expected glycosylation binding patterns and/or characteristics for an individual type.
- A kit according to Claim 18, further comprising an SPR, MCLW or DCLW 19. 20 chip.
 - A kit according to Claim 18 or Claim 19, in which the information includes 20. information relating binding patterns and/or characteristics to candidate disease states.
- A kit according to any of Claims 18 to 20, comprising only lectins. 25 21.

22. A kit according to any of Claims 18 to 21, in which the lectins comprise lectins specific for sialic acid, galactose, mannose, glucosamine or fucose moities in the protein.

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23. A kit according to Claim 22, in which the lectins comprise Sambucus nigra agglutinin and/or Maackia amurensis agglutinin.